

A Critical Review : Mobile Banking Services and its Significant Impact on Rural Customer Behaviour Patterns

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ABSTRACT

The purpose of the research is to address mobile banking services in rural areas and its significant impact on customer behavior patterns. The researcher discussed the recent problem in rural areas where customer are facing due to non- availability of electricity and internet facility , in that case it is very difficult for the customer to access mobile banking services to fulfill their financial needs. The researcher also stated that due to technology literacy problem and their usage constraints about the smart phone without knowing the security features in mobile banking services. In such situation the customer are facing this kinds of problems in mobile banking system in rural areas. The researcher try to cover all possible phases and their problem in rural areas in mobile banking system and their services. This has empowered the Financial Services to focus on financial solutions and products and not on Infrastructure. Further such solutions can be deployed towards Education and medical health care of the same customers through different solutions using the same channels. Having financial services at customer door step will improve the emotional bonding with the rural customer the given population and area; this will reduce operational cost of financial services manifolds. This will improvise productivity, service effectiveness and cost efficiency. We propose a dynamic application on multiple financial products from different Services to allow the common interface to access the individual Business of different participating Financial Solution Services.

Keywords : TRAI, WAP, ATM, MPIN, E-Business

I. INTRODUCTION

In India, the situation of the banks is quite different from the banks overseas particularly in Developed markets. Indian banks are not facing huge write downs or losses and are still quite Well capitalized. The use of technology in India has undergone rapid Transformation. The last two decades have witnessed a sea change in the nature of services Offered by not only banks but also the financial sector and even the Government- all of which have had a positive impact on the customers of these organizations and the general Public at large. Financial Services are generally complex and need a lot of trust for the consumer to use technology. Banks have changed from paper-based banking solutions provider to the latest of the technologies like online-banking, mobile-

banking,etc. It is surprising to know as to why most of the Indian customers have not welcomed this up gradation. Customers across the world, even technologically optimists, have refrained from using technology aided solutions. There are many reasons why technology has not been able to ride the acceptance wave and cross the hurdle and become an acceptable feature in banking. As today's banking has redefined itself as customer centric, it becomes more important that the customer is happy with the services being provided. Unfortunately, the acceptance and adoption rates are very low even in the case of educated customers. The paper looks at various factors which explain why consumers are not using mobile banking and other technologies in banking. It would also try to suggest why people are not currently using mobile banking and try to suggest

how to overcome this problem and increase the acceptance levels.

Indian telecommunication service scenario indicates that cellular or mobile phone service was growing tremendously in last five years. As TRAI's report on telecommunication industry in India, The wire line phone connections were declining in the last few years and mobile phone connections were increased very fast. At present, 16cellular service providers providing cellular service in Indian and there were 621.28million phone connections in India out of these 584.32 million mobile phone connections. Mobile phone service was not only spread in urban areas but also in rural areas in India. The rural mobile connections have reached the 190.88 million mark as against 111.63 million in the previous year and now 32.67% of total wireless subscribers are now in rural areas and the rural tele-density was 24.29%. It is great opportunity to the bankers to facilitate banking service to „unbanked“ through mobile banking system in

India. Providing mobile banking services to the unbanked is not only social responsibility of the bankers but also it is a golden opportunity to the business expansion.

II. CHALLENGES AND SCOPE OF MOBILE BANKING

According to Yu (2009) security experts state that mobile banking is safer than computer banking since very few Tro-jans and viruses exist for phones and that does not mean mobile banking is vulnerable to security threats, but mobile users are particularly susceptible to a publishing-like scam referred as smashing, it occurs when a mobile banking customer receives a fake text message asking the details of bank account from a hacker acting like a financial institution. It is the biggest problem in the mobile banking services. Mobile banking is not

available on all devices. Some banks do not offer mobile banking at all. Others require to use a custom application of mobile banking which is applicable to smart phones alone like RIM blackberry and Apple iphone. Third party mobile banking application or software is not always supported. More advanced features cannot be seen in normal phones. Kumbhar (2011) refers that mobile banking is cost effective and it is a simple way to provide banking to the non-banked customers in India. At present it is not accepted by common customers in India due to the following reasons. Less information technology literacy is adversely affecting the use of mobile phone as an electronic device for banking. Some customers use cell phones for communication purpose alone. Most of rural peoples do not have an idea about mobile banking and how it is applied and used. It is identified that only 3 percent of existing customers are using the services of mobile banking in urban areas and they do not have any clear idea about advantages of mobile banking. Good quality and continuity of cellular service connectivity is not available in the rural areas. Security and trust are the most significant aspects of any banking service, but people have more doubts about its trustworthiness and security.

III. LITERATURE REVIEW

GomathyM(2015) discussed the inclusive growth is possible only through proper allocation and accessing of all the resources from top to bottom. Financial inclusion is an innovative concept which makes alternative techniques to promote the banking habits of the rural people because, India is the largest rural people consist in the world. The Eleventh Five year Plan (2007-12) envisaged inclusive growth as a key objective as well as a strategy for economic development. Financial inclusion is aimed at providing banking and financial services to all people in a fair, transparent and equitable Manner at affordable cost. The main objectives of this study were to know the rural development taken by the banks for

financial inclusion, to examine the difficulties involved in the adoption of financial inclusion and also to enhance the extent of financial inclusion.

Vijay Mahajan and Bharti Gupta Ramola(1996) discussed the a study commissioned by the World Bank, reviews the performance of Indian financial institutions in providing services to the rural poor and examines the key issues facing policy makers and institutions as the country moves forward on financial sector reforms. The study posits two sets of causal variables for institutional performance: (i) Internal Practices Attitudes (IPAs); and (ii) mechanisms for client interface that either enhance or thwart access by the rural poor and women (MEAs). Both of these variables are largely within the control of the financial institutions. The study sought to identify changes in these variables that could improve access to financial services by the rural poor.

Dhananjay Bapat(2012) emphasized this paper is to assess the level of banking penetration in a sample village and to find the relationship between bank accounts and related factors, such as, occupation, income and asset-holding status. The findings indicate that 75.2 per cent of the respondents have bank accounts and 26.7 per cent of the respondents avail credit facilities. Two-thirds of the respondents have inclination to avail credit facilities for dairy and for other business activities. Using chi square analysis, significant relationships were established between bank account and relevant factors, such as, occupation, income and asset-holding pattern. While using logistic regression, we find that having a bank account has a significant correlation with income.

S. V. Krishna Kishore and Aloysius Henry Sequeira(2016) focused on the Government of India (GOI) initialized financial inclusion campaign to quell exclusion. The campaign did not gain expected progress. Government employed technologies to speed up the process. Among banking technologies, mobile

banking appeared as a possible solution for financial exclusion with wide mobile phone coverage. Inputs on rural people's intention toward technologies for effective financial inclusion were essential. Technology adoption factors, performance expectancy, effort expectancy, social influence, attitude, perceived risk, and behavioral intention (BI), were short listed after literature review. Factors were subjected to reliability, exploratory factor analysis (EFA), multiple regression, and interaction analysis.

Jiaqin Yang and Mike Whitefield (2007) described an empirical study of investigating recent trend and development of the application of e-banking (banking though internet) in rural areas and its economic impact on local financial institutions. The data used in this research are collected through a web-based questionnaire survey. The research objective is to investigate how those smaller and community banks located in rural areas have attempted to catch up with their counterparts in larger cities in terms of the application of e-banking, focusing on emerging issues and challenges. The results are discussed with managerial implications along with suggestions for future research.

Amit Shankar (2016) focused on this paper is to explore factors affecting mobile banking (m-banking) adoption behavior of Indian consumers. Furthermore, the purpose is to identify which factors have a major influence on adoption intention in context with m-banking. Design/methodology/approach: Data were collected through an online survey of mobile user respondents. A total of 248 utilizable cases were collected from m-banking users. Review of previous literature has been used to establish hypothesis, exploratory factor analysis and multiple regression analysis has been used to check the significant factors affecting adoption of m-banking in India.

Lennart BÄGE (2006) discussed on the few factors about Forbes magazine rankings and the Deutsche

Bank report underscore the fact that microfinance has moved beyond the fringes of financial services. Over the decades, microfinance has demonstrated that poor people are viable financial-service customers. As a result, the borders between traditional microfinance and the larger financial system are starting to blur. At the grassroots level, microfinance institutions (MFIs) are expanding their reach, while commercial banks and other formal financial institutions are increasingly moving into rural areas to reach poorer and more remote clients. For example, the ICICI Bank, India's second-largest bank, has opened more than 2,000 rural internet kiosks that will provide financial services throughout India. Brazil's Caixa Econômica Federal bank is extending financial services franchises to nearly 14,000 outlets including lottery kiosks, supermarkets and local vendors in Brazil.

M.Bhuvana and Dr. S.Vasanth (2016) are defined as an activity of facilitating banking as well as financial services to the low income group people and people from most vulnerable group in the society. The successful achievement of financial inclusion can be done by the most effective and transparent financial services. In India, government has taken several initiatives to foster financial inclusion. Financial Institutions like banks has shown an immense increase in its extent to provide their banking services to the people from the unreached and excluded sections in the society. But World Bank Global Findex Database 2014 has highlighted that, in India 21% of adults are unbanked and only 53% of adult population possess financial services from a formal financial institutions.

IV. PROBLEM STATEMENT

The purpose of the research is to address the major key challenges in the Rural India while deploying technology is Electricity, connectivity and non-availability of resource in the last mile. The researcher proposed an innovative future technology solutions

for both online and offline methods to handle rural India's main problem on not having Electricity, not able to connect at rural India- Connectivity and non-availability of Resource Reachable to the last mile, this solution will create an robust reliable support systems which will address and allow to access to multiple rural financial requirements from a single mobile Connect solution. This will empower the Business and collection Task Force to serve the Rural Customers of their multiple financial demands. E-Business where less of Electronics and more of Emotions is captured through this solutions. This will enable and empower a unique Point of Contact to serve the existing rural customers and create new customers deploying multiple tailor-made last mile technology solutions at customer door steps. This will enable fundamental nature deleverage Infrastructure required at the last mile from financial services at Rural India.

Research Objectives

1. To identify the highly scalable – Designed and Built on Dynamic Concept, where entire application can be centrally - configured, customized and deployed with zero downtime.
2. To identify the multiple rural financial requirements.
3. To identify the common interface between rural customer behaviors and the individual Business of different participating Financial Solution Services.

Research Questions

1. What are the multiple rural financial requirements?
2. What are the significant research issues in rural customer behaviors patterns?
3. What are the solution of this significant research issues?
4. What are the challenges the customer are facing in rural areas for the financial services?

Research Hypothesis

H01: Mobile banking services does not effect on rural customer behaviors patterns

HA1: Mobile banking system affected the rural customer behaviors patterns with respect to banking services beyond their personal constraints.

V. CONCEPTUAL FRAMEOWRK OF RESEARCH STUDY

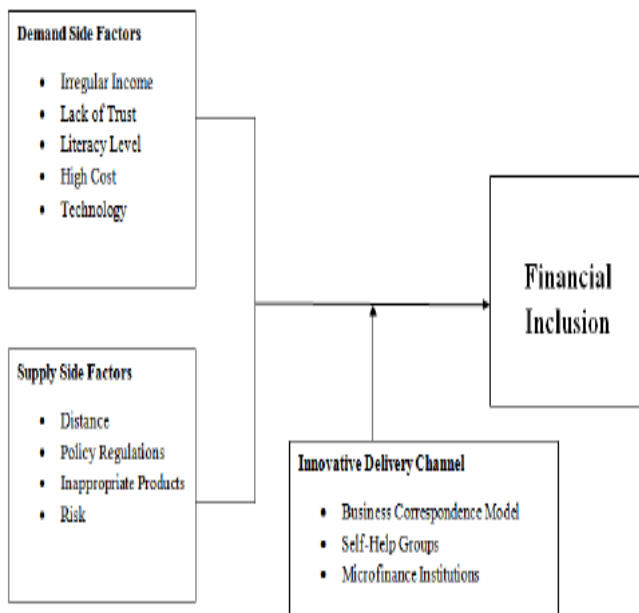


Fig 1.1: Conceptual Framework of Research Study

INDEPENDENT VARIABLES

1. Mobile Presence,
2. Multi-Lingual,
3. User Friendly,
4. Multi Feature,
5. Catering Various Requirement Of An Task-Force, Like Business {CRM, Collection, Backend, Conveyance, Geo-Spatial, Climate Updates, Fertilizer Pesticides , The Location And Route Guider – GPS
6. latest trend patterns, which is available part of the solution, which create the

differentiation in the market, developed using open source

7. Affordable and available as current solution {is mean in yellow} Unique compress technology to use data anywhere anytime. Centrally store, distributed data capture, thru all latest mobile solution as part of the channel

The researcher proposed a dynamic application of multiple financial products from different Services to allow the common interface to access the individual Business of different participating Financial Solution Services.

Dependent Variables

1. Don't have finance literacy, transactional cost is high when we operate to service customer in rural India.
2. Rural customer shy off, and did not supporting financial information, like thumb, {take part in get-together, product mela, rituals, festivals,
3. Culture base, state based, geography based likes – dislikes, interest on towards specifics product which plays a bonding part of their behaviours which is captured
4. **Believe** – Ethics and epics of rural, created a dictionary for more than 2 decades
5. **Behaviour** – the outputs expended, expressed by the CUSTOMER, during good and bad time from the market for the product bought thru us with us.
6. **Business** – keeping the belief, procedure, process, policies converted based on the customer behaviour patterns, which resulted in business growth (enormous).

VI. SIGNIFICANT ROLE OF MOBILE BANKING IN RURAL AREAS

Mobile banking in lay man terms means the using of a mobile phone to offer banking services. Banks have

introduced two different products in mobile banking. One is a personal/retail banking product and the other is a product to promote financial inclusion. As a personal banking product it is offered to every savings/current account holder and provides anytime anywhere banking. The mobile banking initiatives were started by foreign and private banks followed by public sector banks.

Mobile banking service is primarily available over SMS (Short Messaging Service) or through GPRS (General Packet Radio Service) or sometimes through USSD (Unstructured Supplementary Service Data). The services available are:

1. Funds transfer (intra and interbank)
2. Balance enquiry services/mini statements
3. Request services (cheque book)
4. Utility bill payments and credit card payments
5. Demat account services
6. Mobile top up
7. Merchant payment, life insurance premium
8. Stop payment instructions

The rationale for using mobile banking as a product to promote financial inclusion is that even 63 years after independence, the majority of Indians do not have access to banking services. Growth and development of the Indian economy has to translate into income generation and empowerment of the whole population irrespective of areas and sectors. Access to finance by the poor and vulnerable groups is necessary for poverty reduction and social cohesion. Providing access to finance is a form of empowerment of the low income and weaker sections of the society. The various financial services include credit, savings, insurance, payments and remittance facilities.

The majority of the low income groups are wary of opening accounts with Banks partly because the nearest bank branch means an expenditure on transport (especially in the rural areas) plus loss of a day's wages and partly because they are intimidated by the bank branch. The poor are not able to access

banking facilities because of illiteracy, gender, age, low and irregular income, regulating factors like identity documentation, non-availability of bank branches etc. A major barrier cited to expand appropriate banking services to the poor is also the cost of providing these services. Servicing the poor with small value services is not viable using conventional retail banking approach.

To overcome these problems RBI permitted Banks to open basic bank accounts with nil or low minimum balances called No Frills accounts and simplified Know Your Customer (KYC) norms. RBI also permitted Banks to outsource certain activities and issued guidelines for appointment of Business Correspondents and Business Facilitators as Delivery Channels of finance to the poor.

Banks use mobile phones to open smart card based No Frills accounts in unbanked villages and offer banking services through Points of Sale (POS) instruments handled by agents of Business Correspondents. Operations are not permitted for these accounts at the branches except as a fall back (like failure of BC, etc.). This can be called as a Bank in a Box. The entire set up consists of a mobile phone which serves as a POS machine, a finger print scanner and a tiny printer, all of which works on rechargeable batteries and can be packed into a small box. The customers open a No Frills account on smart cards. The smart card is akin to an e-purse and stores information about the customer, the account number, finger prints as well as balance in the account. The smart card can handle a number of accounts including loan accounts. The card is highly secure as it works on the biometric validation of the customer. The smart card works in conjunction with a mobile or hand held connectivity device using the appropriate technology. Transactions are possible in both online and offline mode. It also permits real time updating of the balances in the card. By issuing a smart card to the customer, the cost of the transaction is reduced because paper based transactions are being

dispensed with and the actual operation of the transaction in the account is being shifted from the branch to the Customer Service Point/Provider at any outlet in the location of the customer.

Thus customers can operate their account through a Business Correspondent outlet that only needs a mobile phone, a finger print scanner and a small printer to provide banking facilities and financial security to the customer. The salient features of the account are:

1. It is a No Frills saving account
2. Opened by individuals only
3. No joint accounts are permitted
4. It is available at Customer Service Points(CSP) of bank appointed Business Correspondents/Business Facilitators
5. The initial deposit and minimum balance to be maintained is NIL
6. Rate of interest is as applicable to normal savings accounts
7. Cash withdrawals and funds transfer will be permitted at the CSP, subject to satisfactory biometric verification of the card holder
8. KYC norms will be done as per RBI guidelines for No Frills accounts
9. Nomination is made compulsory by some banks as the smart card is in single name only
10. The core banking (CBS) branch closest to the CSP of the Business Correspondent will be the link branch. The smart card accounts will have the link branch as their home branch
11. Banks normally designate an official to attend to any grievances of the card holders

VII. CONCLUSION

In this paper research did the critical review of mobile banking system and its significant impact on rural areas customer patterns which enable and empower a unique Point of Contact to serve the existing rural customers and create new customers deploying multiple tailor-made last mile technology solutions at

customer door steps. This will enable fundamental nature delevage Infrastructure required at the last mile from financial services at Rural India. This has empowered the Financial Services to focus on financial solutions and products and not on Infrastructure. Further such solutions can be deployed towards Education and medical health care of the same customers through different solutions using the same channels. Having financial services at customer door step will improve the emotional bonding with the rural customer for the given population and area; this will reduce operational cost of financial services manifolds. This will improvise productivity, service effectiveness and cost efficiency. We propose a dynamic application of multiple financial products from different Services to allow the common interface to access the individual Business of different participating Financial Solution Services.

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